Cannabis, a Plant and Its Secret: Cannabidiol

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Introduction: The association between cannabis and psychotic outcomes is systematically reported. Δ9-tetrahydrocannabinol (THC) is the main psychoactive component of cannabis products and studies emphasize the concentration of THC as the main measure of cannabis potency. Cannabidiol (CBD) is another component of cannabis and studies have suggested that CBD might have antipsychotic properties and could therefore modify the paradigm of pharmacologic treatment in psychotic disorders.

Objectives: This work aims to describe the latest knowledge about CBD, its molecular targets and possible therapeutic use in psychiatric disorders.

Methods: This revision was based in articles published in PubMed/MEDLINE, using the following terms 'cannabidiol" 'cannabis", 'psychotic symptoms", 'molecular targets" and 'treatment".

Results: CBD has multiple molecular targets (CB1 receptors, vaniloid system, hydrolysis of anandamide, agonist in 5HT-1A receptors, nuclear receptors of PPAR family and other ion channels), but a full comprehension about them is lacking. Like other cannabinoid compounds, CBD has a biphasic effect in anxiety (lower doses tend to produce anxiolytic-like effect and higher doses produce an anxiogenic-like effect), though the mechanism is not completely understood. The use of high cannabidiol content cannabis and its association with significantly lower degrees of psychotic symptoms have been reported, nevertheless CBD's antipsychotic properties are still controversial.

Conclusions: The higher concentration of CBD in cannabis preparations has been related with fewer psychotic symptoms, compared with a higher THC/CBD ratio plants. Further studies must be held to conclude about CBD's antipsychotic properties, but its effects in anxiety disorders seems to be promising.